INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year:	Park: Shenandoah NP
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Name: John Rappole Phone: 540-635-6563	Email: n/a
Permit#: SHEN1999N-127	
Park-assigned Study Id. #: unknown	
Project Title: Impact Of White-Tailed Deer On Small Mammals And Avian Communities In Temperate Deciduous Forests (N-127)	
Permit Start Date: Jan 01, 2000	Permit Expiration Date Jan 01, 2000
Study Start Date: Jan 01, 1990	Study End Date Jan 01, 2005
Study Status: Completed	
Activity Type: Research	
Subject/Discipline: Other	
Objectives: To determine how populations of white-tailed deer within the park influence the abundance and distribution of select vertebrate species.	
Findings and Status: All five research sites located in the Shenandoah National Park were surveyed using the same protocol as in past years. In June 1999, each site underwent 1000 net hours of mist netting and a total of 462 birds (36 species) were captured, banded and released. These numbers are up from the 1998 season when we caught 363 birds (31 species). Species of note include 4 Brown-headed Cowbirds (Molothrus ater) (two at Dump, two at Keyser) and four Cerulean Warblers (Dendroica cerulea) (one at Dump, two at Range View, and one at Keyser). In April and August of 1998, each of the study sites underwent three days of small mammal trapping. During the August trapping, a total of 376 mammals (8 species) were captured, ear tagged, and released. These numbers are higher than the 1998 season 214 (10 species), but still notably down from the 1997 season when we caught 698 individuals (11 species). Acorn mast was collected from all sites in the Fall of 1999. The sites in the Shenandoah National Park produced an average of 7.0 kg/ha of acorns, which is lower than the 1998 average of 14.8 kg/ha, and still way below what is considered a good mast productivity (200 kg/ha). We walked 234 km of trails during November and saw 48 deer, about half of what we saw in 1998. A density estimate of 4.95 deer/km 2 (+/- 3.5) based on distance sampling is within last year's estimate of 8.9, but well below previous estimates of >20 deer/km 2.	
For this study, were one or more specimens collected and removed from the park but not destroyed during analyses?	
Funding provided this reporting year by NPS:	Funding provided this reporting year by other sources:
0	26000
Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or college	

Full name of college or university:	Annual funding provided by NPS to university or college this reporting year:
n/a	0